

I claim:

1. An air decontamination system, comprising:
a sealed room having an air inlet;
a vacuum unit which creates a negative pressure within said room,
by suctioning air through the air inlet into said room and then from said room
into an inlet of said vacuum unit; and
a filter unit which filters air entering the inlet of said vacuum unit.
2. The air decontamination system of claim 1, wherein said sealed room has a modular construction.
3. The air decontamination system of claim 1, wherein said sealed room includes removable walls.
4. The air decontamination system of claim 3, wherein said sealed room includes at least one of a removable ceiling and a removable floor.
5. The air decontamination system of claim 3, wherein said sealed room includes a removable ceiling and a removable floor.
6. The air decontamination system of claim 1, wherein said sealed room has at least one transparent wall.

7. The air decontamination system of claim 1, further comprising:
an air lock room connected to said sealed room,
wherein said air inlet extends between said sealed room and said
air lock room, and wherein the air suctioned through said air inlet resides within
said air lock room.
8. The air decontamination system of claim 7, further comprising:
another air inlet which allows air to pass from an outside source
into said air lock room, wherein the negative pressure created by said vacuum unit
draws air from said outside source into said sealed room through said another air
inlet and said air inlet.
9. The air decontamination system of claim 8, further comprising:
another filter unit connected to said another air inlet, said another
filter unit filtering air from said outside source.
10. The air decontamination system of claim 1, further comprising:
an intercom system which allows a person outside said room to
communicate with a person inside said room.
11. The air decontamination system of claim 1, further comprising:
a warning device which provides an indication that said sealed
room is in use.

12. The air decontamination system of claim 1, wherein said vacuum unit creates a laminar flow of air within said sorting room.

13. The air decontamination system of claim 1, wherein said filter unit includes:

a first filter which filters particles within a first range of sizes; and

a second filter which filters particles within a second range of sizes,

wherein said second range of sizes is smaller than said first range of sizes.

14. The air decontamination system of claim 13, wherein said filter unit includes a third filter which removes chemical contaminants.

15. A method for removing contaminants from air in a mail sorting room, comprising:

placing an item of mail in the mail sorting room;

creating a downward flow of air within said room, said downward flow of air transporting contaminants from said item of mail into an inlet of a vacuum unit which created said downward flow of air; and

filtering the air entering into the inlet of said vacuum unit to remove said contaminants.

16. The method of claim 15, further comprising:
assembling the mail sorting room.
17. The method of claim 15, wherein said mail sorting room is a
sealed room which contains an air inlet and an air outlet.
18. The method of claim 17, wherein said filtered air exits the outlet of
said sealed mail sorting room.
19. The method of claim 17, wherein said sealed room has a modular
construction.
20. The method of claim 16, wherein said sealed room includes
removable walls.
21. The method of claim 20, wherein said sealed room includes at least
one of a removable ceiling and a removable floor.
22. The method of claim 20, wherein said sealed room includes a
removable ceiling and a removable floor.
23. The method of claim 20, wherein said sealed room has at least one
transparent wall.

24. The method of claim 15, further comprising:
positioning the inlet of said vacuum unit underneath a mail sorting
table in said room.

25. The method of claim 15, wherein said sealed room includes an
intercom system which allows a person outside said room to communicate with a
person inside said room.

26. The method of claim 15, wherein said sealed room includes a
warning device which provides an indication that said sealed room is in use.

27. The method of claim 15, wherein said downward flow of air is a
laminar air flow.

28. The method of claim 15, wherein said filtering step includes:
filtering particles within a first range of sizes from the air
suctioned from the edges of said table; and
filtering particles within a second range of sizes from said filtered
air,
wherein said second range of sizes is smaller than said first range
of sizes.

29. The method of claim 28, wherein said filtering step includes filtering chemical contaminants from the air suctioned from the edges of said table.

30. The method of claim 17, further comprising:
attaching an air lock room to said mail sorting room,
wherein said air inlet extends between said sealed room and said air lock room, and wherein the air suctioned through said air inlet resides within said air lock room.

31. The method of claim 30, further comprising:
wherein negative pressure created by said vacuum unit in said mail sorting room draws air from into said sealed room through said another air inlet and said air inlet.

32. The method of claim 31, further comprising:
another filter unit connected to said another air inlet, said another filter unit filtering air from an outside source.

33. The method of claim 15, further comprising:
providing a mail cleaning device in the mail sorting room, said mail cleaning device including a chamber having an air inlet and an air outlet, said air outlet connected to a vacuum unit and a filter, said vacuum unit

suctioning air through said air inlet to create an air flow through said chamber;
and

inserting the item of mail into the mail cleaning device.

34. A mail cleaning system, comprising:

a chamber having an air inlet and an air outlet;

a vacuum unit connected to the air outlet of the chamber, said vacuum unit suctioning air through the air inlet to create an air flow through said chamber; and

a filter which filters air suctioned through the air outlet by the vacuum unit, wherein said chamber includes an entrance for allowing an item of mail to pass into the air flow for cleaning.

35. The system of claim 34, wherein the vacuum unit creates said air flow within a range of 50 C.F.M. to 400 C.F.M.

36. The system of claim 34, further comprising:

a conveyor which carries said item of mail to the entrance of said chamber.

37. The system of claim 36, wherein the conveyor automatically carries said item of mail through the entrance of said chamber to an exit of said chamber.